





#### **ESSENTIAL TEAMWORK FOR WINNING DESIGNS**

# USB / Ethernet-Solved<sup>™</sup> Development Kit Overview

The USB / Ethernet-Solved™ Development Kit allows projects based around USB and Ethernet to be created quickly and easily. It builds on the USB-Solved™ and Ethernet-Solved™ frameworks to give complete solutions in a matter of minutes. Add USB or Ethernet functionality to an existing embedded system, or create new solutions using this development kit as a foundation.

Application areas include Industrial communications eg. web server link to sensors, serial to USB or Ethernet conversion, Ethernet connection to USB hosted peripherals. Products requiring large quantities of Flash memory and high performance analogue to digital or digital to analogue conversion are particularly well served.

## **Key Features:**

- Cy-Solved<sup>™</sup> solution for Ethernet and USB embedded applications.
- Ready-to-go eCOG1X microcontroller project example templates including webserver utilising FAT file system on USB memory stick.
- Easy customisation using free of charge CyanIDE®2 tools.
- Drag and drop software components, including USB and Ethernet stacks.
- Includes unrestricted CyanIDE2 IDE, compiler, toolchain and high speed eICE dongle.



#### **Board Features:**

- eCOG1X14Z5 microcontroller
  - 512KB flash
  - 24KB SRAM
  - 4x UART
  - 12-bit 200ksps ADC
  - 12-bit DAC
  - 10/100 Ethernet
  - USB 2.0 compatible host/slave/OTG peripheral
- 16MB SDRAM
- Ethernet PHY and RJ45 connector
- USB connectors for use with internal PHY (LS, FS) and external PHY (HS)
- RS 232 Buffer x 1 channel

# Example Project Templates provided for:

- Webserver which serves pages over Ethernet to a standard browser that have been stored on a standard external USB memory stick. The pages can be updated remotely using FTP.
- Data logging from an analogue channel to a USB flash disc.
- DNS Resolver
- Many others..

#### **Software Components:**

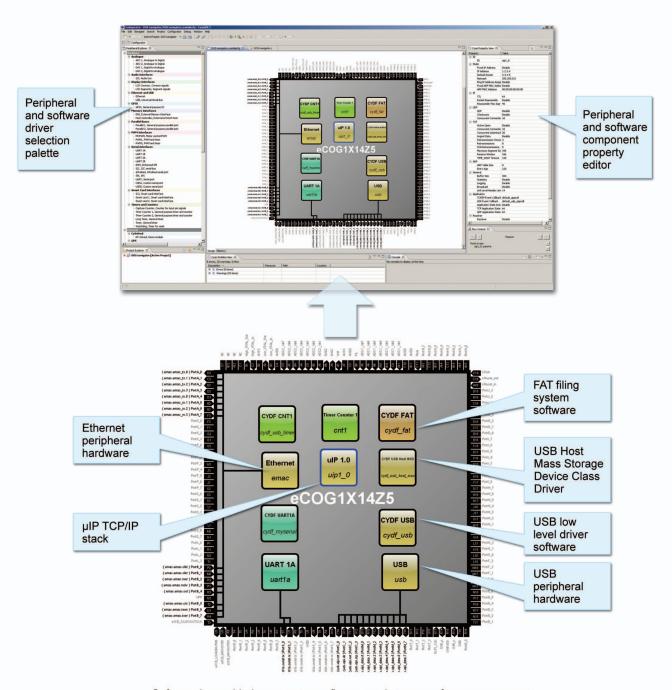
- Ethernet stack, with:
- TCP/IP
  - UDP
  - ICMP (Ping)
  - DHCP Client
  - DNS Client
  - HTTP Web ServerTelnet Server
- FTP Server
- USB Stack, with:
  - Keyboard device
  - Audio device
  - CDC Serial (Q3 2008)
  - MSD device
- FAT File System
- CYDF Driver Framework

www.cyantechnology.com



### Rapid code development using CyanIDE®2:

CyanIDE 2 provides an Eclipse based software development environment with production quality gcc based toolchain. Using the CyanIDE Configurator, software components and hardware modules are selected using drag & drop and configured with an easy to use GUI based property editor.



Software is provided as easy to configure, ready to run software components.